

## BATTERY SEPARATOR AND ALKALINE SECONDARY BATTERY USING THIS

## BATTERY SEPARATOR AND ALKALINE SECONDARY BATTERY USING THIS

Patent Number: JP8315800  
Publication date: 1996-11-29  
Inventor(s): SASAKI YASUYUKI; OBARA HIDEHIKO; IMAKI SUNAO  
Applicant(s):: MITSUBISHI CHEM CORP  
Requested Patent: ☐ JP8315800  
Application Number: JP19950118410 19950517  
Priority Number(s):  
IPC Classification: H01M2/16 ; D04H1/54 ; D04H1/58 ; H01M10/24  
EC Classification:  
EC Classification:  
Equivalents:

---

### Abstract

---

**PURPOSE:** To provide a high-degree hydrophilic property, electrolyte absorbing speed and work time safety as unseen so far, and enhance its industrial value without impairing characteristics such as chemical resistance and solvent resistance possessed by polyolefine fiber nonwoven fabric itself in a battery separator.

**CONSTITUTION:** In nonwoven fabric or a film composed of synthetic resin, and in ESCA measurement, when a peak energy value derived from (-C-H,-C-C-) bonding of a C1 S electron is denoted by 285eV, while a bond energy value of an F1 S electron is 686 to 688eV, and while a bond energy value of an FKLL Auger electron is 829 to 833eV, it has respectively the peak tops. The element composition ratio (O/F) of oxygen to fluorine in the element composition measured by an ESCA is not less than 0.5, and the O/F measured by fluorescent X-ray spectroscopy is not less than 0.4.